

ENERGY STAR® Condensed Course

Give your students practical experience in building energy efficiency.

The simple
choice for
energy
efficiency.



What is the ENERGY STAR condensed course?

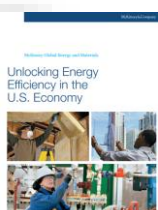
EPA's updated ENERGY STAR college-level **condensed course**, *Introduction to Commercial Building Energy Efficiency Through EPA's ENERGY STAR Program*, gives your students practical, hands-on experience with commercial building energy efficiency.

The course is available at **no cost** to all interested colleges, universities, schools, associations, and organizations. As a three-unit condensed curriculum package, the course is **adaptable**: it can easily be added to an existing course or used for a short, standalone course to give your students an edge in the rapidly expanding green workforce. It's filled with **practical**, real-world examples and student activities for driving home the importance of commercial building energy efficiency. A cornerstone of the course is an **applied project** where students go out into their communities to benchmark a building. This gives students an opportunity for hands-on learning.

Course Outline

Students will learn how eliminating energy waste can help improve an organization's bottom line while helping to protect the environment, and how this work develops skills they can bring to their current or future workplace.

Unit 1. Why Energy Efficiency Matters

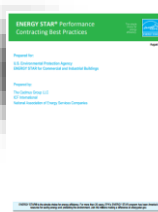


Unit 1 discusses the multiple benefits of improving energy efficiency, barriers to efficiency together with how to solve them, and how EPA's ENERGY STAR Commercial Buildings program fits into the efficiency equation.

Student Discussion: Independently or in groups, students are asked to consider the barriers and possible solutions to energy efficiency a building portfolio owner might have.

Key Reading Unit 1: [Unlocking Energy Efficiency in the U.S. Economy](#)

Unit 2. Strategies for Overcoming Efficiency Barriers



Unit 2 discusses the different roles that governments, utilities, private sector, and nonprofits can play in improving energy efficiency, and introduces students to energy financing. It also covers how to engage building occupants in saving energy.

Student Discussion: Independently or in small groups, students will consider the pros and cons of benchmarking and disclosure laws, which many local governments have enacted.

Key Reading Unit 2: [ENERGY STAR Performance Contracting Best Practices](#)

Unit 3. How to Benchmark a Building Using Portfolio Manager



Unit 3 explores benchmarking energy, water, and waste in ENERGY STAR Portfolio Manager, and includes an in-depth training on using the tool.

Student Discussion I: To exemplify the power of Portfolio Manager, students are asked to evaluate the energy use of 12 fire stations in a city and discuss how the city should apply a limited budget for making efficiency improvements.

Student Discussion II: Students are asked to interpret the results of benchmarking six K-12 schools in Portfolio Manager and discuss the data's value.

Key Reading Unit 3: [Portfolio Manager Quick Start Guide](#)

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Interested in more hands-on learning?

The ENERGY STAR condensed course offers [expanded assignments](#) that instructors can utilize for additional applied, hands-on learning. These are designed to be utilized as take-home assignments and can be modified as instructors see fit.

- **Unit 1 Assignment: Identify Potential Barriers and Solutions to Efficiency in Example Buildings** – analyze three buildings with different attributes
- **Unit 2 Assignment: Design a Competition** – develop a proposal for an efficiency competition between buildings
- **Unit 3 Assignment: Benchmark a Property and Verify Accuracy** – use Portfolio Manager to benchmark sample properties.

Suggested uses for the condensed course

Anyone can use and edit the course as they see fit. Here are a few possible applications:

- **College instructors** teaching building efficiency or other environmental or sustainability subjects can integrate one or more units from the ENERGY STAR Condensed Course into an existing course, or use it as-is to offer their students a standalone, short course about building efficiency.
- **Professionals and local or state government employees** in places that have or are considering a benchmarking law and/or voluntary benchmarking program can use the Condensed Course to educate stakeholders on the value of efficiency and to equip them with core benchmarking skills.
- **Associations and organizations** can use the Condensed Course to educate their members and staff on the importance and multiple benefits of building efficiency.

Why ENERGY STAR?

This course is presented by a program you can trust: ENERGY STAR, the government-backed symbol for energy efficiency, recognized by more than 90% of Americans. When you add your buildings, you'll be joining 40 percent of U.S. commercial space that's already benchmarked in ENERGY STAR Portfolio Manager® — making it the industry-leading benchmarking tool.

Want to learn more?

For more information on the ENERGY STAR Condensed Course, visit www.energystar.gov/course. To request the full set of materials, please contact Brendan Hall, ENERGY STAR Public Sector Program Manager, at hall.brendan@epa.gov. Materials for a semester-long, off-the shelf course are also available.

Student Benefits

- **Practical experience**
Opportunity to think through real-world energy efficiency problems and get hands-on experience
- **Skills for a growing green economy**
Gain valuable skills for the workplace, such as improving profitability through energy efficiency
- **Applied community service**
Use newly acquired skills to benchmark a building for a local building owner or manager